

92mm sq.**San Ace 92**

Only standard fans (without sensors) have acquired CSA certification.

General Specifications

- Material..... Frame: Aluminum, Impeller: Plastics (Flammability: UL94V-1)
- Expected Life Refer to specifications (L10:Survival rate: 90% at 60°C , rated voltage,and continuously run in a free air state)
- Dielectric Strength 50/60Hz 1,500VAC 1minute (between input terminal and frame)
- Dielectric Strength (With Sensor) ... Between AC input and DC input(Sensor output)
: 50/60Hz 1,000VAC 1minute
Between AC input and G
: 50/60Hz 1,500VAC 1minute,
Between G and DC input(Sensor output)
: 50/60Hz 1,000VAC 1minute
- Sensor-Purpose Lead Wire ... ⊕ brown ⊖ black (Sensor) yellow
- Storage Temperature -30°C to +70°C (Non-condensing)
- Operating Voltage Range ... Voltage of each model ±10%

92×92×25mm [Mass : 290g / 310g (with Sensor)]

Specifications Standard

Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Max. Airflow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchHzO]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109S091	100	50/60	8/7	0.1 /0.09	0.13/0.12	2,700/3,100	0.95/1.1 33.6/38.9	39.2/49.0 0.157/0.197	35/38	-30 to +60	25,000/60°C
109S093	115			0.09/0.08	0.11/0.1						
109S092	200			11/10	0.07/0.06						
109S094	230		10/9	0.06/0.05	0.07/0.07						
109S095	100		8/7	0.1 /0.09	0.11/0.1	2,400/2,800	0.84/0.98 29.7/34.6	31.4/40.2 0.126/0.161	32/35		
109S096	100		7/6	0.09/0.08	0.09/0.08	1,500/1,700	0.55/0.65 19.4/23	12.5/16.3 0.050/0.065	24/27		
109S193	115			0.08/0.07	0.08/0.07						
109S192	200		8/7	0.06/0.05	0.06/0.05						
109S194	230			0.05/0.04	0.05/0.04						

with Sensor

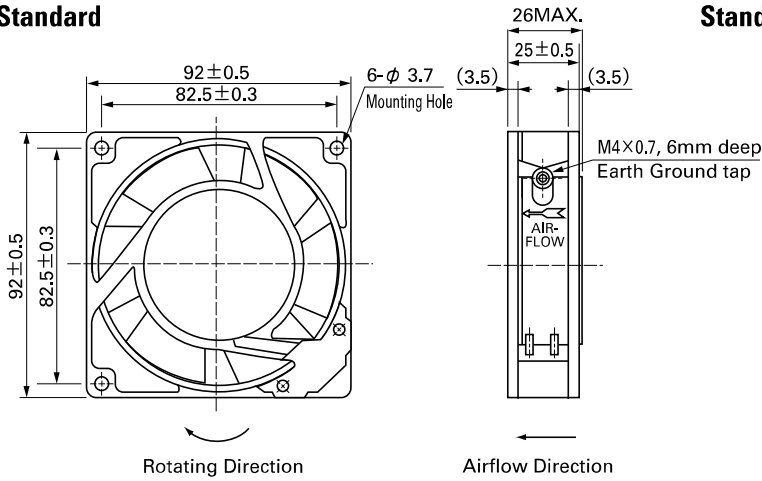
Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Max. Airflow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchHzO]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109S491	100	50/60	8/7	0.1 /0.09	0.13/0.12	2,700/3,100	0.95/1.1 33.6/38.9	39.2/49.0 0.157/0.197	35/38	-10 to +60	25,000/60°C
109S493	115			0.09/0.08	0.11/0.1						
109S492	200			11/10	0.07/0.06						
109S494	230		10/9	0.06/0.05	0.07/0.07						
109S495	100		8/7	0.1 /0.09	0.11/0.1	2,400/2,800	0.84/0.98 29.7/34.6	31.4/40.2 0.126/0.161	32/35		
109S496			7/6	0.09/0.08	0.09/0.08	1,500/1,700	0.55/0.65 19.4/23	12.5/16.3 0.050/0.065	24/27		

Two types of power supplies, 5V (ITEM-20) and 12V (ITEM-30), are available in fans with sensor attached.

- Set Models** Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to pp. 453 to 456.

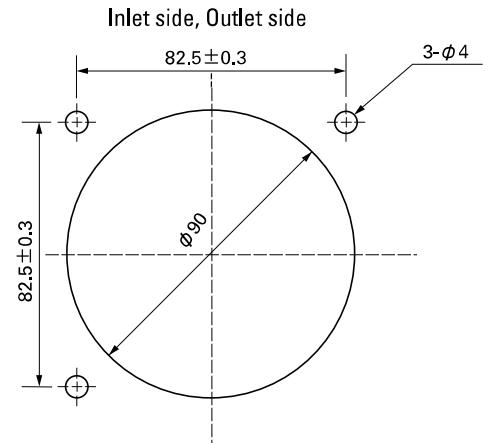
Dimensions (unit: mm)

Standard

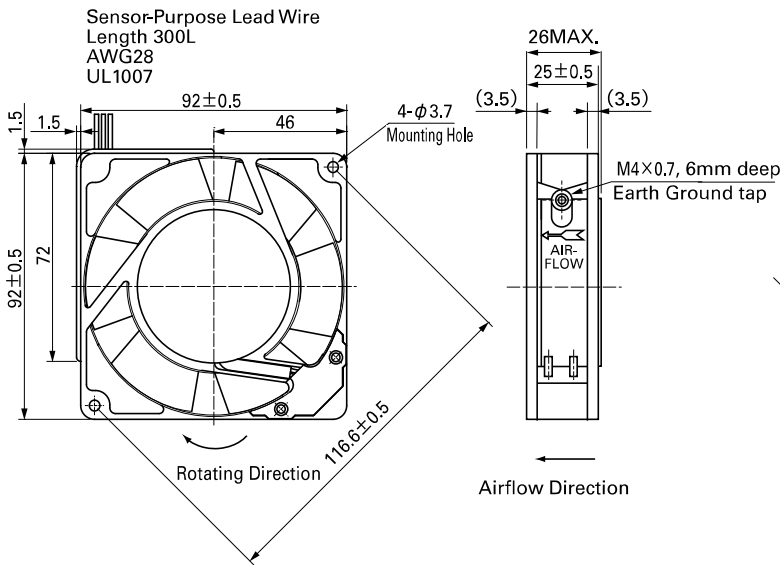


Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

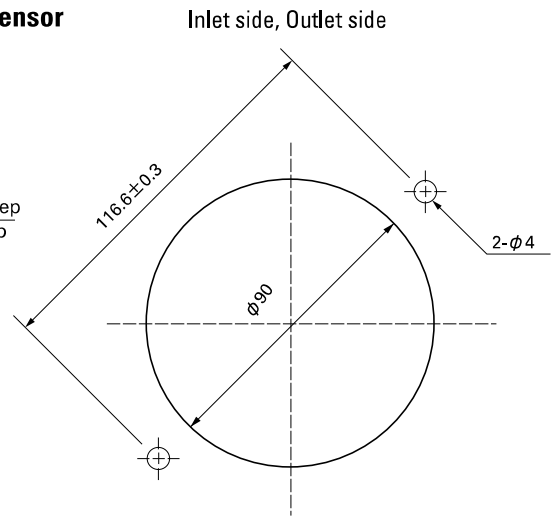
Standard



with Sensor

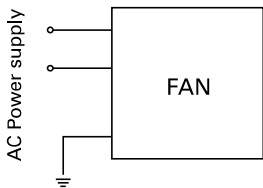


with Sensor



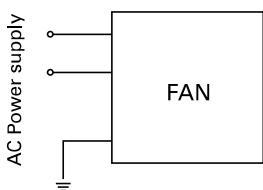
Wiring Diagram

Standard

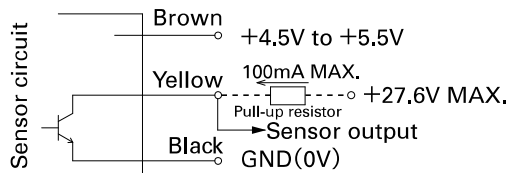


with Sensor

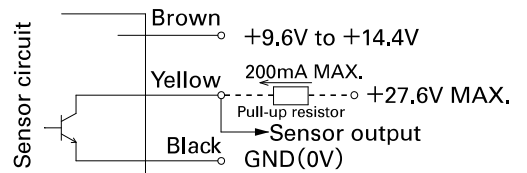
(For fan power supply)



5V (ITEM-20)



12V (ITEM-30)



GND (Black) should be shared in case that power supply for sensor circuit (Brown) and that for sensor pull-up (Yellow) are separated.

92mm sq.

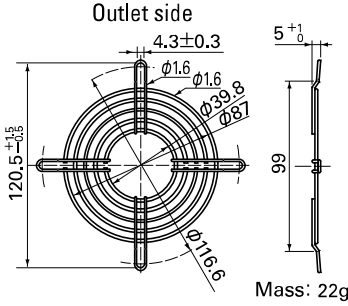
San Ace 92

92×92×25mm [Mass : 290g / 310g (with Sensor)]

Options (unit: mm)

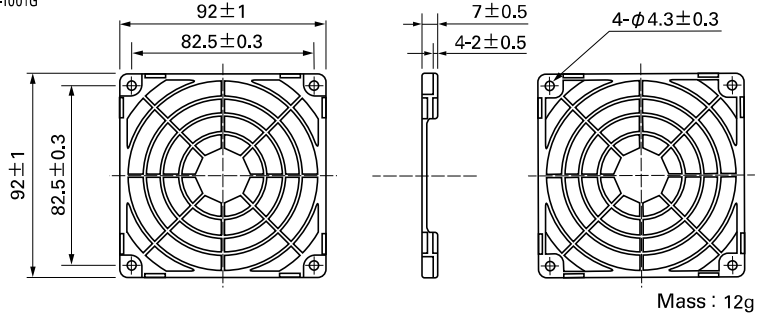
Finger Guards

Model : 109-099C Surface treatment : Nickel-chrome plating (silver) Color



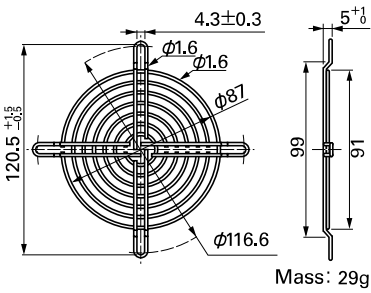
Resin Finger Guards

Model : 109-1001G



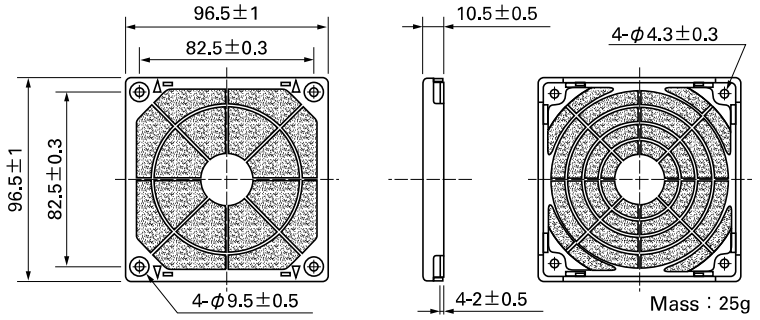
Model : 109-099E Surface treatment : Nickel-chrome plating (silver) Color
: 109-099H : Cation electroplating (black)

Inlet side, Outlet side



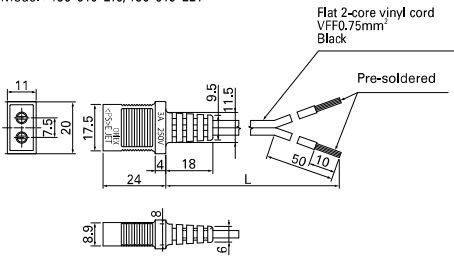
Resin Filter Kits

Model : 109-1001F13 (13PPI), 109-1001F20 (20PPI)
: 109-1001F30 (30PPI), 109-1001F40 (40PPI)

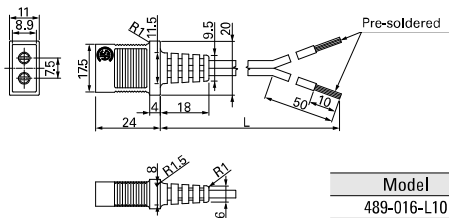


Plug Cord

(Products compliant with Electrical Appliance and Material Safety Law)
Model : 489-016-L10/489-016-L21



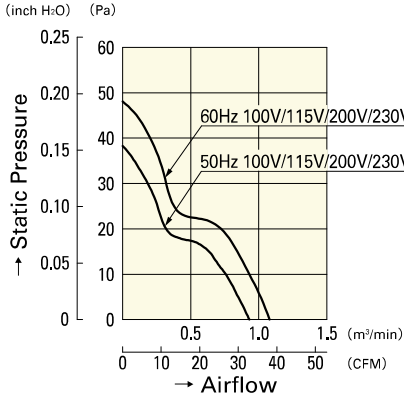
(UL/CSA CERTIFIED)
UL FILE No.E50197 CSA FILE No.LR67048
Model : 489-047-L10/489-047-L21



Model	Power cord length (L) [mm]	Mass [g]
489-016-L10	1,000	34
489-016-L21	2,100	64
489-047-L10	1,000	38
489-047-L21	2,100	71

Airflow - Static Pressure Characteristics

Standard

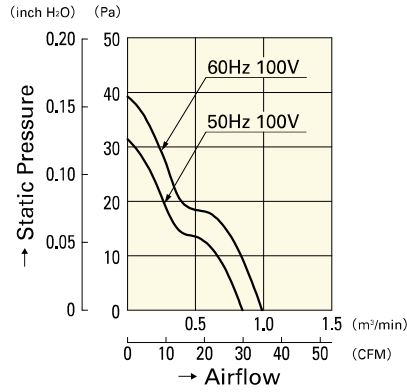


109S091

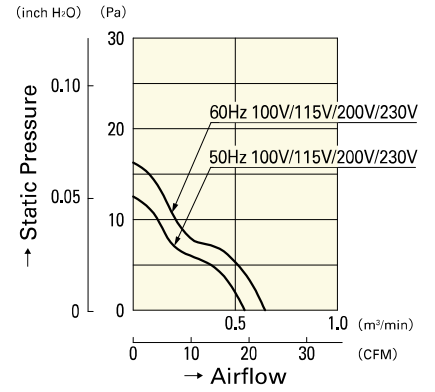
109S093

109S092

109S094



109S095



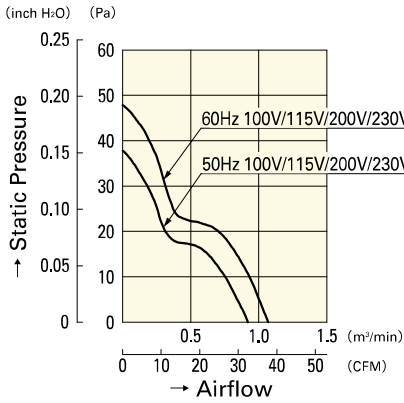
109S096

109S193

109S192

109S194

with Sensor

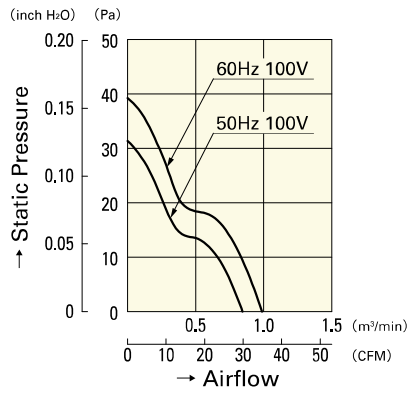


109S491

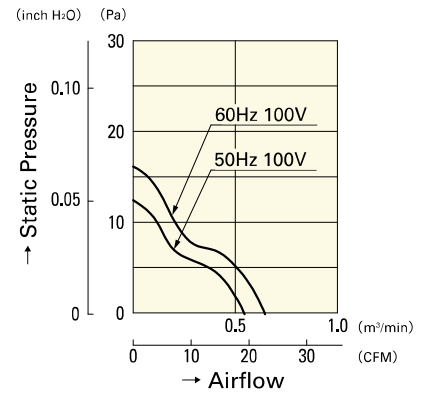
109S493

109S492

109S494



109S495



109S496